Delphi Method Tool Review

Public Engagement Tools

TABLES Project 2012: Mini reviews	
Guidance	*Using your experience and expertise, consider the following tasks in relation to the tool. It may not be possible to complete all tasks for each tool due to a lack of available information, the task not applying to the tool, etc.* **Please note where this is the case by writing in the reason in the space provided**. *Please use a maximum of 6 pages of A4 (excluding diagrams and appendices).* **Your responses are required in the white spaces**.
Task 1: Basic information	
Name of the tool	Delphi method
Type of tool (list all that apply)	Participatory; collaborative; decision; forecasting
Group members	1. Jayne Glass (UHI)
	2.
	3.

| Please provide a brief synopsis of the tool | The Delphi technique is a participatory method that can be used to create a constructed space (Glass et al. 2013; Donohoe, 2011) for reflective research by structuring a group communication process so that it allows "a group of individuals, as a whole, to deal with a complex problem" (Linstone and Turoff, 2002, p.3). By engaging a 'panel' of participants (normally experts) in an anonymous survey, the technique is used to generate opinion and/or consensus about a particular topic or policy issue over a series of iterative rounds (for a thorough review of the method and systematic guidelines for its application, see Donohoe and Needham, 2008; Donohoe, 2011).

Participants are asked to complete a series of written questionnaires by the researcher, who collates the responses to the questions posed in each round and feeds these responses back to the participants for their consideration, giving each panel member the opportunity to adjust their responses accordingly, if they so wish (Hasson et al., 2000). This process enables the researcher to identify areas of consensus and conflict, and to feed these back to the panel for further comment: the iterative nature of the process provides a catalyst for reflecting multiple interests, values and expertise (Hung et al., 2008). Such information exchanges allow participants to change their positions in light of new evidence and generate new ideas; a process which arguably works better than individual interviews because the structured feedback process increases creativity by widening knowledge and stimulating ideas (Powell, 2003).

Applications of the technique can be found in a range of research contexts, including: nursing and health (e.g. Hasson et al., 2000; Powell, 2003), tourism and ecotourism (e.g. Miller, 2001; Garrod et al., 2005; Briedenhann and Butts, 2006), sustainable transport and spatial planning (e.g. Tolley et al., 2001; Shiftan et al., 2003), performance evaluation (e.g. Kuo et al., 2005; Hung et al., 2008), forecasting, and climate change adaptation and mitigation (e.g. de Loë, 1995; Angus et al., 2003).

It is the anonymity of panel members that distinguishes the Delphi technique from other participatory methods such as brainstorming, focus groups, and workshops. In contrast to these face-to-face group exercises, anonymity can help to avoid negative factors such as the domination of powerful groups and individuals and the fact that only one person can speak at a time (Landeta, 2006: Scott, 2011). |

Task 2: Use of the tool			
Position / Use	**Stage**	**Currently used**	**Could be used**
	Ideas	Y Can be used to gather ideas	
	Survey	Y Can be used as a scoping tool to gauge current knowledge on a topic	
	Assess	Y Can be used to evaluate performance (in the eyes of the group)	
	Policy / decision	Y Has been used as a policy tool to enable a group of experts to reach a decision	
	Implement	Not so common	
	Evaluate	Y Can be used to evaluate performance and reach consensus on experience	
	Please add any further comments here: Delphi is a flexible tool that can be used for a range of purposes. Crucially, the question posed needs to be asked over a series of stages to allow deliberation and iteration. This gives participants time to consider their ideas/opinions in the context of others'.		

Task 3: Existing literature about the tool			
Are you aware of any KEY policy and / or academic literature evaluating your tool?	**Author & Date**	**Title Vol pages**	**Web link (if available)**
	Glass et al. 2013	The power of the process: co-producing a sustainability assessment toolkit for upland estate management in Scotland. Land Use Policy, 30(1), 254-265.	
	Donohoe and Needham 2008	Moving Best Practice Forward: Delphi Characteristics, Advantages, Potential Problems, and Solutions. International Journal of Tourism Research, 11 (5), 415-437.	
	Linstone and Turoff 2002	The Delphi Method: Techniques and	http://is.njit.edu/pubs/delphibook/

		Applications	
	Donohoe 2011	A Delphi toolkit for ecotourism research. Journal of Ecotourism, 10 (1), 1-20.	
	Others available on request		

Task 4: Your experience of working on the tool

Have you done any research/consultancy work on this tool in terms of its development, testing and/or evaluation?	I employed a Delphi method to develop the 'Sustainable Estates' tool which is described in a separate tool review. I developed the method to some extent, in order to use it to develop a tool, rather than its more traditional uses as a policy discussion or forecasting tool.
Guidance	For Tasks 5-7, please also try to consider the **future** development and application of this tool in the TABLES project in your answers.

Task 5: Incorporating the ecosystem approach (EA) and ecosystem services (ES)

Using examples (from practice, research or consultancy), explain how EA and/or ES are currently incorporated in/by the tool	Delphi does not explicitly incorporate EA/ES. However, it could be used to bring stakeholders together to consider aspects/problems related to EA/ES.
How could the ecosystem approach and/or ecosystem services be (further) incorporated within the existing tool?	I do not think that this tool could explicitly incorporate the EA/ES. However, it could be used to bring stakeholders together to consider aspects/problems related to EA/ES, or develop plans/strategies/solutions encountered in the application of other tools.

Task 6: Situating the tool within priority questions/criteria arising from the scoping interviews

Explain how the tool can be situated	**Priority question/criteria**	**Does your tool address/implement this question/criteria? Or does it have the potential if it was better integrated with an EA/ES approach?**

within the priority questions/criteria that arose in the scoping interviews			*Please explain how.*
	Language and communication		
	1.	Contribution to aiding the development of shared vocabulary within which principles of EA and ES can be shared with multiple stakeholders across built and/or natural environment	Delphi has the potential to address this as it could be used to bring multiple stakeholders together to develop a shared vocabulary. The anonymous character of the process would likely help to achieve this.
	2.	Capacity of the tool to develop shared understandings of the many identities and values of places from the perspectives of multiple visitors, residents and businesses	Again, Delphi has the potential to develop shared understandings through its use as a scoping tool. It could be used to gather the multiple perspectives of stakeholders and the data could then be fed back to the group to invite their views on each other's ideas.
	3.	Capacity of the tool to improve or enable engagement across different publics so avoiding the usual suspect problem	Delphi is an excellent tool for bringing together 'non-usual' suspects. This is particularly easy because of the anonymous nature of the tool so, if there are conflicts between subjects, these should be minimised within the process.
	Learning from experience/pedagogy		
	4.	Capacity of the tool to help reveal and value 'hidden' assets that are not recognised by communities or publics that use them	Delphi allows participants to anonymously bring all of their ideas to the table so the method could help to reveal 'hidden' assets that might not be considered.
	5.	Extent to which tool is building on other tools or EA/ES progress	Not explicitly but it could be used to develop other tools.
	6.	Extent to which tool is locally derived or grounded or can be adjusted to closely reflect 'local' context. Is the tool suitable for an open source approach?	Delphi is not explicitly designed for the local context. However, bringing together a group of 'local' stakeholders within a Delphi exercise would help to paint the picture of the local context and enhance mutual understanding.
	7.	Extent to which the tool is open to interpretation and application in a variety of forms (that reflect 'cultural' differences)	The method is quite prescriptive but there is scope to tailor the process to suit the question that is being considered.
	Developing and selecting tools		
	8.	Is the tool dependent on a specific funding source? How onerous is the application procedure? What are the chances of success?	The tool is not dependent on a particular funding source. However, it requires skilled facilitation.
	9.	Does skills development (essential or optional?) and support exist for the tool or is there a body to ensure the optimal and correct use of it?	No, although academic literature/guidance exists. A process facilitator is required.

	10. Extent to which current statutory hooks can be exploited by the tool or will benefit the quality or application of the tool (e.g. NNPF's duty to cooperate, SUDS, ecol. networks)	None.
	Informing resultant policies effectively	
	11. Extent to which the tool informs or improves policies/decisions. What does the tool cover? (full range of positive and negative economic, social and environment impacts / tradeoffs?)	This is one of Delphi's main strengths as it allows a wide range of knowledge on a topic to be brought together and negotiated. The results of a process could be used to inform/improve policy decisions.
	12. How does the tool link into the planning system (applications and processes). At what cost / extra burden?	Not explicitly, but it could be incorporated into participatory planning processes.
	Delivering management objectives	
	13. Suitability or capacity of the tool to assist with managing visitor needs and pressures within protected areas / the considered area? How?	Not explicit but could be used to develop a plan to manage issues such as this.
	Local ownership/new governance	
	14. To what extent can the tool assist in developing statutory plans (local and management plans) and improve ownership and use by publics?	Delphi could be used to engage a range of stakeholders in planning processes.
	15. To what extent does/could the tool contribute to a new form of community governance in management of the environment?	It does not.
	Improved tools: understanding flows, interconnections and spatial issues	
	16. Capacity to improve spatial understandings of the flows and interactions of various ecosystem services between sectors and at different scales	This could be aided by Delphi but the quality of resulting understanding would be reliant on the involvement of suitable knowledge on the Delphi 'panel'.
	17. Capacity of the tool to reconcile assessments of options and benefits across different scales (and sectors)	This could be done on an opinion-basis amongst the group.
	18. Extent to which the tool is capable or can be manipulated to work across sectoral and administrative boundaries	Delphi can work across boundaries by ensuring that participants represent different scales/knowledge.
	19. Extent to which the tool can handle data shortages and gaps	Not well – the quality of the outputs depends on the knowledge on the 'panel'. However, it could also be

	(or is effectiveness considerably compromised?)	used to identify knowledge gaps.
	20. To what extent has/could the tool put landscape/nature conservation and designated species/sites on the radar (positively or resulting in resentment?)	Not really.

Please add any further comments here:

Task 7: A SWOT analysis of the tool

Referring back to the relevant policy and academic literature (listed in Task 3), plus your own expertise (listed in Task 4) and the way in which the tool is situated within the priority questions/criteria (listed in Task 6), please complete a summary SWOT analysis ensuring that each point is well justified

Strengths *(of the tool in delivering intended outcomes)*

As a reminder: Delphi allows a group of people to work together anonymously to reach a decision, develop ideas and/or gather knowledge on a topic.

- It removes power imbalances amongst the group (removes the need for face to face discussion)
- It is an iterative process so allows people to consider their own views in the context of others' – this can lead to consensus-building/identification of key barrier and stumbling blocks
- It can be applied to most situations/questions as it is quite flexible
- Participants can take part in their own time (completing questionnaires), rather than requiring to attend a meeting at a specific time
- It can be used to work with the 'non-usual' suspects and/or geographically disparate groups as its flexibility in taking part removes the need for people to travel

Weaknesses *(factors that detract from the tool's ability to deliver intended outcomes)*

- Participant drop-out is a problem – requiring people to take part over a series of stages can cause this (as can a poorly-managed process/non-stimulating material)
- It requires skilled facilitation of the process (the facilitator is responsible for collating responses and compiling them for feedback to the group – facilitator bias/misrepresentation can be an issue)

Opportunities *(consider opportunities for application of the ecosystem approach and services)*

There is an opportunity to use this method to enhance other tools reviewed within this project.

Threats *(factors which negatively affect the tool and its outcomes)*

Threat	Seriousness (high, medium, low)	Probability of occurrence (high, medium, low)
Participant drop-out due to time commitment/interest	High	High

Please add further comments here: